## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

11-192478

(43)Date of publication of application: 21.07.1999

(51)Int.Cl.

CO2F 1/30 A47K 3/00 B01D 35/027 B01D 39/20

B01J 35/02

(21)Application number: 09-368375

(71)Applicant: BRIDGESTONE CORP

(22)Date of filing:

28.12.1997

(72)Inventor: HORI HIROMICHI

**GOSHIMA MICHIO** 

## (54) PURIFYING MATERIAL FOR WARM WATER IN BATHTUB, AND WARM BATH SYSTEM (57)Abstract:

PROBLEM TO BE SOLVED: To prevent warm from being contaminated by the microorganisms entering the warm water and purification failure without needing a propagation vessel for microorganisms by preparing a purifying materials for purifying the warm water in a bathtub while introducing the warm water by using an inorganic oxide in the shape of particulates generating minus ions by photocatalytic reaction.

SOLUTION: This purifying material used when warm water in a bathtub is taken in to purify it and the purified water is returned to the bathtub again is prepared by using an inorganic oxide in the shape of particulates generating minus ions by photocatalytic reaction. As the inorganic oxide, silica, alumina, titania, magnesia, and ferrous and ferric silver oxide are used. The purifying material is preferably used so that the inorganic oxide in the shape of particulates generating minus ions by photocatalytic reaction and silane compounds, zirconium compounds, other fillers or the like are mixed and the mixture is turned into a composite to form an inorganic coating by low- temperature heating, and the composite is fixed to a parent material having large surface area such as sand or ceramic foam.

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection

Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]